

abundance of roots, the presence of a large number of leaves of the preceding year, which had remained attached to the plant throughout the winter, the true leaves of the season just becoming visible, and which appeared to be of greater abundance than those of a former year's growth, all gave evidence of the presence of an unusual amount of vitality. No flowers had been produced at all, at the same time the flower stalks which had produced leaves were exceedingly numerous. This morphologic change gave evidence of still another: as these leaves upon close examination were found to be covered with a fungoid growth of a low type, the tendency of which may have been to dwarf or disturb the full and free exercise of the vital force of the plant.

Mr. THOMAS MEEHAN observed that he was not prepared to say that extra vigorous growth in a plant had any relation to morphological changes in the parts of the inflorescence, but he regarded with great interest the specimen exhibited, because he believed the normal change of leaves to sepals would not have been interfered with but for the presence of the minute fungus. As in the cases which he had in the past brought to the notice of the Academy, where *Euphorbia prostrata* and *Portulaca oleracea* became erect when attacked by an *Æcidium*, he thought the present an illustration that varying phases of nutrition governed form. We know from many observations that interference with nutrition had an influence on morphological changes. The calla (*Richardia Æthiopica*) which under one system of culture produced all leaves, under others had some of them changed to its white spathaceous flowers, and a ringed branch would often cause what would otherwise have been leaves and branches to become flowers and fruit. It was a great point gained to perceive the agent in the change, though the precise law influencing the agent was still obscure.

*On Citrine or Yellow Quartz.*—Prof. LEIDY made remarks on citrine or yellow quartz with the hope of eliciting more accurate information as to its origin. Cut as a gem it is common, and is sold by the jewellers (almost to the exclusion of the true mineral) for topaz. The cut specimens of citrine occur in all shades, from a pale straw-yellow to the richest orange hue, often with a brown tinge more or less deep. Uncut specimens of the mineral of equal quality in color are rare in mineralogical collections. Pale yellow citrine is derived from many localities, but the best and deeper colored varieties are said to come from Brazil. In the museum of the Academy there is a pebble of pale yellow citrine, about the size of a fist, presented from the Brazilian collection, at the close of the late International Exhibition. In the display of quartzes of the Brazilian collection no darker specimens of the citrine were observed.

Some authorities refer to citrine as probably being produced by burning amethyst or smoky-quartz (*Kluge: Handb. Edelsteinkunde*, 374; *Lange: Halbedelsteine*, 30). Prof. Leidy exhibited clear, colorless specimens of quartz, cut and in the natural crystal, which he said were amethysts and smoky-quartz, which had been submitted for a short time to a moderate red heat, resulting in the total expulsion of all color. Smoky-quartz of the darkest hue, from Paris, Maine; Hot Springs, Arkansas; and Pike's Peak, Colorado, have the color completely dissipated after a short exposure to moderate red heat. Perhaps heating under peculiar circumstances may convert the usual color of amethyst into the yellow of the citrine, but specimens heated in the ordinary manner did not indicate such a change.

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FEBRUARY 26.

The President, Dr. RUSCHENBERGER, in the chair.

Thirty-two persons present.

The deaths of Prof. Andreas Retzius and of Dr. O. A. L. Mörch, correspondents, were announced.

Papers entitled "Distribution of Spiders by the Trade Winds," and "The Basilea Spider (*Epeira basilea*)," by the Rev. H. C. McCook, were presented for publication.

J. Gozzardini, Bologna; G. Meneghini, Pisa; Antoine Stoppani, Milan; Francisco Coello, Madrid; J. J. Steenstrup, Copenhagen; F. Steenstrup, Copenhagen; R. Brough Smyth, Melbourne; Edouard Van Beneden, Liege; and Jules Künckel d'Herencalais, Paris, were elected Correspondents.

The following papers were ordered to be printed:—